706-B-306 BRIDGE RAILINGS

(Adopted 03-15-18)

The Standard Specifications are revised as follows:

SECTION 706, BEGIN LINE 49, INSERT AND DELETE AS FOLLOWS:

Unless otherwise specified the slip form method may be used as a means to place concrete railing on bridge structures. If the slip form method is chosen, a signed and dated QCP shall be prepared and submitted to the Engineer for acceptance at least 15 days prior to the start of slip form barrier rail placement. The QCP shall include, as a minimum, the Contractor's concrete mix design, including materials sources and admixtures; the Contractor's methods of materials control and testing; the Contractor's proposed method of placement, including finishing and curing; and the corrective action that will be taken when defects are found. The QCP shall also contain documentation that shows the Contractor had a successful trial demonstration of the slip form machine previously and that proper consolidation around the reinforcing bars in the wall was achieved. The slip form paver shall consolidate, screed, and finish the freshly placed concrete in one complete pass in such a manner that a minimum of hand finishing will be necessary to provide a dense and homogeneous railing in conformance with the plans and specifications. The requirement to include a water-reducing admixture in accordance with 702.05 will be waived if the railing is both slipformed and the concrete contains silica fume in accordance with 709.05(e). The slump shall be $\frac{1}{2}$ 1 3/4 in. $\pm \frac{1}{2}$ 3/4 in. The joints may be formed or sawed as long as a satisfactory joint is attained. If joints are to be sawed, the full depth saw cut shall be made before uncontrolled shrinkage cracking occurs and within 48 h of concrete placement. Before full depth sawing, partial depth saw cuts of 2 1/2 in. \pm 1/2 in. at the joint locations may be made as soon as the concrete has hardened sufficiently to enable sawing without raveling. All saw cuts shall be made at the locations shown on the plans or as directed.